# Department's Processes for Validating the EDUCATE Contractor's Performance

# FINAL AUDIT REPORT



# ED-OIG/A19K0007 May 2011

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U.S. Department of Education Office of Inspector General Washington, DC

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#### UNITED STATES DEPARTMENT OF EDUCATION

#### OFFICE OF INSPECTOR GENERAL

**AUDIT SERVICES** 

May 31, 2011

## Memorandum

**TO:** Danny Harris

**Chief Information Officer** 

Office of the Chief Information Officer

Thomas Skelly

Delegated to Perform Functions and Duties of the Chief Financial Officer

Office of the Chief Financial Officer

**FROM:** Keith West /s/

Assistant Inspector General for Audit

**SUBJECT:** Final Audit Report

Department's Processes for Validating the EDUCATE Contractor's Performance

Control Number ED-OIG/A19K0007

Attached is the **final audit report** that covers the results of our review to determine whether the Department had adequate controls in place to validate the EDUCATE contractor's performance prior to authorizing payment of invoices. An electronic copy has been provided to your Audit Liaison Officers (ALO). We received the combined comments from the Office of the Chief Information Officer and Office of the Chief Financial Officer and the corrective action plan for each of the recommendations in our draft report.

Corrective actions proposed (resolution phase) and implemented (closure phase) by your office will be monitored and tracked through the Department's Audit Accountability and Resolution Tracking System (AARTS). Department policy requires that you develop a final corrective action plan (CAP) for our review in the automated system within 30 days of the issuance of this report. The CAP should set forth the specific action items and targeted completion dates necessary to implement final corrective actions on the findings and recommendations contained in this final audit report.

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Messrs. Harris and Skelly Page 2 of 2

We appreciate the cooperation given to us during this review. If you have any questions, please call Michele Weaver-Dugan at (202) 245-6941.

## Enclosure

cc: Deborah Coleman, ALO, Office of the Chief Information Officer Roscoe Price, ALO, Office of the Chief Financial Officer, Contracts and Acquisition Management

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#### **EXECUTIVE SUMMARY**

The Education Department Utility for Communications, Applications, and Technology Environment (EDUCATE) contract established a Contractor-Owned Contractor-Operated Information Technology (IT) service model for the Department of Education (Department) under which the EDUCATE contractor provides the total IT platform and infrastructure to support Department employees in meeting the Department's mission. The contract was awarded in September 2007 as a 10-year, performance-based, indefinite delivery/indefinite quantity contract with fixed unit prices.

The Department monitors and evaluates the contractor-provided IT services through a Service Level Agreement (SLA)<sup>1</sup> framework that applies incentives or disincentives if performance falls above or below established standards. The EDUCATE contractor bills the Department monthly for the provided services through the use of chargeback reports, which list unit-based hardware and software profiles for end users, as well as charges for help desk support services, e-mail services, telecommunications usage, and printers. Data from the Department's Contract and Purchasing Support System indicated the EDUCATE contractor had been paid \$134 million from November 2007 through December 2010.

The objective of our audit was to determine whether the Department had adequate controls in place to validate the EDUCATE contractor's performance prior to authorizing payment of invoices. Overall, our audit found that the Department does not have adequate controls in place for validating contractor performance. Specifically, we found that the Department's validation processes do not provide independent assurance of contractor performance or assurance of the quality of the data being relied upon to assess performance. In addition, the Department has not always assigned personnel with the appropriate qualifications to validate contractor-submitted SLA performance data. We also determined the Department does not always use independent, accurate, or complete data to validate contractor-prepared chargeback reports, provides limited time for review of these reports by affected parties, and duplicates effort during the chargeback report validation process. Finally, we found that the current SLA framework is ineffective in encouraging the EDUCATE contractor to improve performance. As a result, the Department does not have assurance that the EDUCATE contractor is performing as required, will improve performance when necessary, and is being paid appropriately for the level of service provided.

To correct the weaknesses identified, we recommend that the Chief Information Officer and Chief Financial Officer, among other things:

- Review all SLAs and identify possible sources of independent supporting data to be used for SLA performance validation.
- Implement procedures to periodically test underlying performance data in the contractor's systems for accuracy, especially data that is being relied upon for SLA validation purposes.

<sup>&</sup>lt;sup>1</sup> SLAs formally define the contractor's required level of performance.

- Formally establish and implement validation procedures, to include the identification of appropriate supporting documentation to be used for validation, for each SLA.
- Identify the necessary knowledge, skills, and abilities required for oversight of each SLA and staff positions accordingly.
- Determine whether an independent data source is available for use in validating chargeback reports.
- Establish and implement written procedures to reflect the intended chargeback report validation process. The procedures should reflect the current IT environment, identify roles and responsibilities of officials and offices involved in the chargeback report validation process, ensure sufficient time is available for effective review of chargeback reports, and clearly define data sources to be used for validation purposes.
- Reevaluate the allocation of incentives and disincentives to ensure they are appropriate for achieving the desired results of the SLA framework, in accordance with guidelines and best practices for performance-based contracting.
- Establish and implement guidelines for routine reviews and evaluations of the appropriateness of the allocation of incentives and disincentives.

In its response to the draft audit report, the Office of the Chief Information Officer (OCIO) and Office of the Chief Financial Officer (OCFO) concurred with 12 of the 14 recommendations. OCIO/OCFO did not concur with draft recommendation 1.4 related to duplicative validation tasks performed by the Independent Verification and Validation (IV&V) contractor and Service Level Agreement Monitors (SLAMs). OCIO/OCFO noted that duplication was intended. OCIO/OCFO also did not concur with draft recommendation 3.1 related to the identification of independent data sources for validation of chargeback reports, stating that the recommendation would create a redundant source of chargeback data and would be contrary to good business practices. In response to the Department's comments, we have slightly modified recommendation 1.4. In addition, we noted that the Department's response to draft recommendation 4.2 was inconsistent with what was intended by the recommendation. As a result, we have slightly modified recommendation 4.2 to more clearly define its intent.

Overall, OCIO/OCFO stated that the report provided valuable insight and accurately identified several areas of needed improvement, but also stated that limited consideration was given to OCIO/OCFO efforts made during the past year to address specific issues presented in the report. During our fieldwork, we engaged in many discussions with applicable Department officials and staff, to include senior OCIO management, SLAMs, Contracts and Acquisition Management representatives, Program Office staff with responsibility for chargeback report validation, the Chargeback Program Manager, as well as IV&V contractor representatives, to gain an understanding of the Department's processes for validating contractor performance and chargeback reports. We also prepared process flow charts that were reviewed by appropriate OCIO staff, reviewed applicable documented processes, and reviewed corrective actions taken in response to prior related Office of Inspector General (OIG) work. While the scope of our review covered the period November 2007 through March 2010, we also inquired about any changes OCIO made to validation processes between April 2010 and December 2010 when we conducted our fieldwork.

Subsequent to fieldwork completion, OIG solicited additional comments and information from OCIO in response to our proposed findings and recommendations. During the exit conference conducted on December 7, 2010, OCIO officials expressed their belief that the necessary processes to validate SLA performance were in place and the chargeback process had been revamped within the past year. In a related discussion, OIG requested that OCIO provide any specific additional information that should be considered in preparation of our draft report. In response, OCIO officials stated they would provide information relating to significant process updates. However, on December 12, 2010, OCIO officials responded via email that they had no additional comments at that time.

Other than the slight modifications to draft recommendations 1.4 and 4.2 previously mentioned, we have not made any additional changes to our findings or recommendations. OCIO/OCFO's comments are summarized at the end of each applicable finding. The full text of OCIO/OCFO's response is included as Enclosure 3 to this report.

#### **BACKGROUND**

The Education Department Utility for Communications, Applications, and Technology Environment (EDUCATE) contract established a Contractor-Owned Contractor-Operated (COCO) Information Technology (IT) service model for the Department of Education (Department) under which the EDUCATE contractor provides the total IT platform and infrastructure to support Department employees in meeting the Department's mission. This includes items such as desktop and printer services, help desk support, data center operations, e-mail, network, disaster recovery, and other special services. The contract was awarded in September 2007 as a 10-year, performance-based, indefinite delivery/indefinite quantity contract with fixed unit prices.

The Department monitors and evaluates the contractor-provided IT services through a Service Level Agreement (SLA) framework that applies incentives or disincentives if performance falls above or below established standards. The EDUCATE contractor bills the Department monthly for the provided services through the use of chargeback reports, which list unit-based hardware and software profiles for end users, as well as charges for help desk support services, e-mail services, telecommunications usage, and printers. All charges, including incentives and disincentives, are reflected in the monthly invoices provided to the Department. Data from the Department's Contract and Purchasing Support System (CPSS) indicated the EDUCATE contractor had been paid \$134 million from November 2007 through December 2010.

## **SLA Validation**

The Department's process to validate SLA performance includes multiple Department officials and the support of an Independent Verification & Validation (IV&V) contractor. The Department's Contract Line Item Number (CLIN) owners are responsible for evaluating the distinct services and deliverables under the EDUCATE contract. Within this role, CLIN owners oversee performance of all of the SLAs within their CLIN.<sup>2</sup> To assist CLIN owners with their responsibilities, the Department uses Service Level Agreement Monitors (SLAMs) to monitor the contractor's performance under 36<sup>3</sup> SLAs on a daily basis. The SLAMs' responsibilities include validating monthly reports for their respective SLAs and determining whether or not the EDUCATE contractor met or missed the SLAs' performance standard for the month. In some instances a CLIN owner may also serve as a SLAM. The total number of SLAMs varied during our fieldwork; however, as of April 2010 there were nine SLAMs.

The IV&V contractor's responsibilities include assisting the Department in reviewing the EDUCATE contractor's performance. Within this role, the IV&V contractor conducts independent reviews of the SLA reports and analyzes the reasonableness of corresponding supporting documentation. The IV&V contractor submits monthly reports summarizing the

<sup>&</sup>lt;sup>2</sup> EDUCATE CLINs consist of: Desktop Services; Helpdesk Support Services; Systems/Data Center Services; E-mail Services; Network, Telecommunication, and Multimedia Services; Disaster Recovery Services; Special Services; and Printer Services.

<sup>&</sup>lt;sup>3</sup> Total number of SLAs as of March 1, 2009.

EDUCATE contractor's performance during the prior month to the Department's contract administration team.

SLA performance data originates primarily from three data sources. The first source is the Operational Process Application Suite System (OPAS), which is the EDUCATE contractor's system for creating, tracking, and retaining help desk tickets created from customer calls. The second source is from network and security management tools used to monitor and administer the network and track intrusions or vulnerabilities. The third source is customer satisfaction surveys completed by Department users.

#### **Chargeback Validation**

The EDUCATE contractor bills the Department monthly through the use of chargeback reports, which list unit-based hardware and software profiles for end users, as well as charges for help desk support services, e-mail services, telecommunications usage, and printers. The chargeback reports are the basis for the unit-based costs on the monthly invoices. The chargeback approach is designed to ensure that cost allocations are distributed to Principal Offices (PO) based on usage.

On the 1<sup>st</sup> business day of the month, the EDUCATE contractor extracts data from its systems related to all usage-based items and services from the prior month. The EDUCATE contractor has 2 weeks to prepare and edit the chargeback reports for delivery to the Department. By the 16<sup>th</sup> day of each month, the EDUCATE contractor provides the chargeback reports, listing the IT assets assigned to each PO, to the Department's Chargeback Program Manager (PM).

The Chargeback Program Management Office (PMO), consisting of 3 SLAMs, conducts a preliminary review of the chargeback reports for the Department's 24 POs. The PMO follows a 27-point checklist developed by the Department to validate the chargeback reports. The PMO has 5 calendar days to review the reports and provide feedback to the Chargeback PM. According to the Chargeback PM, she reviews the PMO comments and performs a final cursory review of the reports for additional errors. The Chargeback PM sends feedback on the reports back to the EDUCATE contractor as needed.

According to the Chargeback PM, once all changes have been made, she notifies the Contracting Officer's Representative (COR) to accept the chargeback reports as a deliverable. The Chargeback PM distributes the applicable chargeback reports to the assigned Principal Office Coordinators (POCs) via e-mail on the 20<sup>th</sup> day of the month. The POCs have 3 business days to review the chargeback reports and provide requests for changes through OPAS. Corrections identified by the POC reviews are reflected in the subsequent month's reports as long as they are received by the EDUCATE contractor within the 3<sup>rd</sup> business day after the 20<sup>th</sup> of the month.

#### **AUDIT RESULTS**

Overall, our audit found that the Department does not have adequate controls in place to validate the EDUCATE contractor's performance. We found that the Department's processes do not provide independent assurance of contractor performance or assurance of the quality of the data being relied upon to assess performance. In addition, the Department has not always assigned personnel with the appropriate qualifications to validate contractor-submitted SLA performance data. We also found the Department needs to improve processes for validation of chargeback reports of unit-based expenses. Specifically, the Department does not always use independent, accurate, or complete data to validate chargeback reports, provides limited time for affected parties to review the reports, and duplicates effort during the validation process. Finally, we found that the current SLA framework is ineffective in encouraging the EDUCATE contractor to improve performance. As a result, the Department does not have assurance that the EDUCATE contractor is performing as required, will improve performance when necessary, and is being paid appropriately for the level of service provided.

# FINDING NO. 1 - The Department Needs to Improve Processes for Validation of Service Level Agreement Performance.

The Department does not have adequate processes in place to validate SLA performance. Specifically, the Department's validation processes do not provide independent assurance of contractor performance or assurance of the quality of the data being relied upon to assess performance.

### Lack of Independent Assurance

We noted that the Department relies on the EDUCATE contractor's data and contractor-developed queries<sup>4</sup> in its SLA validation processes. We reviewed the processes used by 6 of 9 SLAMs (66.7 percent) responsible for validation of 7 of 36 SLAs (19 percent) to validate the completeness of the contractor's SLA reports and to follow-up on identified anomalies.<sup>5</sup> Our review revealed a lack of independence within the processes. Contractor data is essentially being used to validate contractor data, as follows:

- The six SLAMs stated that any anomalies within the contractor's SLA reports are researched using the corresponding contractor data.
- Three of the six SLAMs stated that they generate their own reports from the contractor's OPAS using contractor-provided queries. The SLAMs then compare the results of the queries to the contractor's SLA reports to determine if any differences exist.

<sup>&</sup>lt;sup>4</sup> A query is used to extract information from a database in a readable format according to the user's request.

<sup>&</sup>lt;sup>5</sup> See Enclosure 1 for summary of selected SLAs.

We found that the IV&V contractor processes appear to be duplicative of those performed by the selected Department SLAMs. Specifically, an IV&V official stated that they generate reports from the EDUCATE contractor's OPAS for ticket-based SLAs. The reports are then compared to those developed by the EDUCATE contractor and provided to the SLAMs, similar to the process employed by at least three of the SLAMs noted above.

#### Lack of Assurance of Data Quality

The data sources for the seven SLAs we reviewed included four OPAS-based SLAs, two system tool-based SLAs, and one survey-based SLA. Overall we found the processes implemented by the Department in its performance validation for each of the seven SLAs did not include steps to gain assurance that the data used as a basis for performance reporting from any of the three data sources were accurate.

We reviewed other activities performed by the Department that may have provided assurance of the quality of performance data. This included the Department's response to a prior Office of Inspector General (OIG) report and work conducted by its IV&V contractor. We determined neither of these activities provided assurance of the accuracy of the EDUCATE contractor's performance data, as further described below.

The Office of the Chief Information Officer's (OCIO) corrective actions taken in response to ED-OIG/L19K0001<sup>6</sup> included: 1) assessing the data elements used for data collection for each SLA to assure accuracy; and 2) assessing the accuracy of the underlying data. With regard to the first item, according to Department officials, the Department examined OPAS queries used by SLAMs and concluded the queries provided data necessary for SLAMs to assess SLA performance. It did not determine whether other data elements should also have been included. With respect to the second item, OCIO officials stated they did not look at the accuracy of data but rather reviewed sampled tickets to ensure they contained sufficient detail for use in performance evaluation. In response to an OIG request, OCIO was unable to provide the documentation relating to either of the above processes, to include items such as the number and types of records selected, the analysis conducted, and related results.

The IV&V contract applicable to EDUCATE requires a weekly review of the quality of help desk tickets. To perform this review, the IV&V contractor samples 150 closed help desk tickets and reviews related data based on criteria from the EDUCATE contractor's Helpdesk Procedures. The IV&V review consists of nine criteria and includes checks of items such as key fields not being left blank, appropriate use of the incident description field, and confirmation of closure with the customer. We noted that between April 2009 and March 2010, the IV&V contractor documented problems with the overall quality of help desk tickets stored in OPAS. For example, the March 2010 IV&V report identified data quality problems with 49 of the 150 tickets sampled (33 percent). Specific problem areas included:

• Sampled tickets (25 percent) did not contain enough information to show how or if the problem was resolved; and

<sup>6</sup> Untimely Resolution of Issues Impacting Performance Validation and Payment Calculations Under the EDUCATE Contract (L19K0001), dated March 9, 2010.

• Sampled tickets (37 percent) did not document if the user was satisfied with the results and agreed the ticket could be closed.

As part of the corrective action in response to the aforementioned OIG report, OCIO officials also indicated they attempted to independently replicate the results of the contractor-provided queries. However, these officials indicated that they were unable to develop queries that returned the same results as those of the EDUCATE contractor.

In conducting this audit, OIG also attempted to independently replicate the results of the contractor-provided queries. We generated a report for 1 of the 7 selected SLAs (14 percent) using the query generated by the EDUCATE contractor for the March 2010 reporting period. We found that our report included 7,077 items compared to the 3,514 items in the contractor's SLA report. We followed-up on this discrepancy with the responsible SLAM, who stated the contractor's query extracts OPAS data that should be attributed to other SLAs and that the contractor manually revises the data returned by the query to prepare the final SLA report. The SLAM stated he relies on the contractor's finalized report for validation because the task of replicating the contractor's processes are too complicated and time consuming.

The Government Accountability Office (GAO) "Standards for Internal Control in the Federal Government" states that internal control is an integral component of an organization's management that provides reasonable assurance that objectives are being achieved, to include the effectiveness and efficiency of operations. It also serves as the first line of defense in safeguarding assets and preventing and detecting errors and fraud, and helps government program managers achieve desired results through effective stewardship of public resources.

The EDUCATE Contract Monitoring Plan states that contractor performance is monitored through the established SLA framework. We found that the SLA framework establishes the SLA owner, the frequency at which data is captured, and the source of the data supporting the SLA performance. However, the framework does not require processes to validate the accuracy of the performance data, take into consideration the independence of the data sources being used to validate performance, or specify validation procedures. The Department's SLAMs subsequently developed their own procedures relating to SLA validation and did not include processes to test data accuracy. In related discussions during our audit, SLAMs did not appear to be concerned with the lack of independent data.

The SLA validation process also lacked adequate management oversight from the inception of the contract. While performance under the EDUCATE contract began in November 2007, Department management did not begin examining the validation process until December 2009, after approximately \$84 million had already been paid to the EDUCATE contractor. However, as noted above, these efforts were unsuccessful in establishing data quality and did not address the issue of independent validation sources.

By not obtaining independent supporting data to validate the contractor's performance, the Department does not have assurance that the EDUCATE contractor is accurately reporting on its performance and is receiving proper payment for the level of performance provided. Due to the inherent conflict that exists with the EDUCATE contractor reporting out on its own performance,

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<sup>&</sup>lt;sup>7</sup> GN-5. Time to Resolve

the Department should obtain independent assurance from outside sources whenever possible. Although issues with OPAS data quality have been identified, SLAMs continue to rely on this data as the sole source of supporting documentation for certain SLA validation processes. Duplicative processes performed by SLAMs and the IV&V contractor result in the inefficient utilization of human resources.

#### Recommendations

We recommend that the Chief Information Officer (CIO) and Chief Financial Officer (CFO)

- 1.1 Review all SLAs and identify possible sources of independent supporting data to be used for SLA performance validation.
- 1.2 Implement procedures to periodically test underlying performance data in the contractor's systems for accuracy, especially data that is being relied upon for SLA validation purposes.
- 1.3 Formally establish and implement validation procedures, to include the identification of appropriate supporting documentation to be used for validation, for each SLA.
- 1.4 Review SLA validation tasks performed by the IV&V contractor against those performed by SLAMs and eliminate identified duplicative efforts, where appropriate, to ensure the most effective use of resources.

#### **Department Comments**

OCIO and OCFO generally concurred with the recommendations and provided a corrective action plan for each, with the exception of draft recommendation 1.4, related to duplicative validation tasks performed by the IV&V contractor and SLAMs. OCIO noted the necessity of independence of the IV&V contractor and that duplication is intended. In response to draft recommendation 1.1, OCIO added that the EDUCATE contract specifically calls for the collection of much of the specific data that is used to assess the respective SLAs and that it invests resources to assess audit trails of the data sufficient to ensure its reliance and attest to its authenticity.

## **OIG Response**

The IV&V contract's Performance Work Statement defined the following tasks to be performed by the IV&V contractor:

- Task 2 Management support service provide management support to include review of work products and/or deliverables for accuracy, completeness, and quality.
- Task 5 SLA support provide management support in OCIO in overseeing the EDUCATE contract in evaluating service provider performance as stated in the SLAs and reported by the service provider. This shall include attending the daily SLA meetings and reviewing raw data that is input into the SLA.

As provided above, the IV&V contract is not clear as to whether the IV&V contractor is required to duplicate SLAM tasks. Nor is it clear that the IV&V contractor must duplicate such tasks in order to maintain independence and perform its management and SLA support functions as defined in the contract. Further, as noted in the finding, only some of the SLAMs were performing tasks duplicative of IV&V tasks. This raises a question as to whether the Department truly intended for such tasks to be duplicative. We found that due to a lack of documented SLA validation procedures, SLAMs developed their own processes. This raises the possibility that some SLAMs unknowingly implemented procedures that were duplicative of those already being performed by the IV&V. Reviewing and eliminating unnecessary duplicative tasks could help ensure that the Department's resources are more efficiently and effectively utilized. We have modified the associated draft recommendation slightly to reflect that while some tasks performed by IV&V staff and Department staff may need to be duplicated, others may not call for such action and should be considered for elimination from one of the respective parties' assigned duties.

While OCIO notes that resources are invested to ensure data provided by the EDUCATE contractor are accurate and reliable, we found that processes cited to provide assurance over query and data quality were limited and could not be substantiated, as detailed in our finding.

During the exit conference conducted on December 7, 2010, OCIO officials expressed their belief that the necessary processes to validate SLA performance had been implemented since we conducted our audit work. OIG proceeded to solicit additional comments and information from OCIO in response to our proposed findings and recommendations, to determine whether any additional processes had been implemented that we were unaware of and to ensure proper consideration was given to them during the preparation of our draft report. No additional information was provided at the meeting. OIG granted additional time for OCIO to provide information prior to the issuance of the draft report. In response, OCIO officials stated they would provide information relating to significant process updates. However, on December 12, 2010, OCIO officials responded via email that they had no additional comments at that time.

# FINDING NO. 2 – The Department Needs to Ensure SLAMs Have Appropriate Technical Expertise to Monitor Assigned EDUCATE Contract SLAs.

During the period covered by our review, the Department inappropriately staffed SLA validation positions with employees lacking the technical expertise to effectively perform their roles and responsibilities. We found that 2 of the 6 SLAMs included in our review (33 percent) did not have the technical background necessary to effectively monitor their assigned performance areas.

• One individual was assigned as the SLAM responsible for monitoring network performance SLAs in September 2007. During discussions regarding his responsibilities as a SLAM, this individual stated that he did not possess the technical knowledge needed to perform this function. Although he had previous experience with aspects of network contract management, for example serving as a COR for several telecommunications and multimedia service contracts, he believed he was not knowledgeable about the technical aspects of network monitoring. We subsequently reviewed a listing of SLAM qualifications that OCIO provided as justification for this individual's assignment to the

SLAM position. The qualifications noted for this individual consisted of certifications as a Professional Property Manager and COR. The noted qualifications were not aligned with the responsibilities of monitoring network performance SLAs. This individual asked for reassignment in November 2009 and was subsequently reassigned to monitor the EDUCATE SLA relating to property management, a better fit for his skill set.

• The second individual was originally assigned to the role of Network, Telecommunications, and Multimedia Services CLIN owner in September 2007. Before being assigned to work with the network CLIN, he worked with OCIO's Investment Acquisitions Management Group and Project Management Office. As CLIN owner, he was responsible for overseeing three SLAMs, who were supposed to have the technical expertise to directly monitor SLA performance. As such, the CLIN owner stated that he relied on the SLAMs as technical experts. However, after the transfer of the SLAM discussed immediately above and the retirement of another SLAM under his supervision in December 2009, the CLIN owner was left with increased responsibilities. He stated that because of the staffing limitations he assumed some SLAM responsibilities to monitor and validate the contractor's performance without sufficient technical expertise or time needed to do so effectively. According to the listing of qualifications provided by OCIO, this individual possesses a Government Financial Manager certification and Information Technology Infrastructure Library (ITIL) v3 foundation, 8 neither of which appear to relate to the responsibilities of monitoring network performance SLAs.

The CLIN owner stated he began presenting his staffing concerns to management in December 2009, and was assigned two additional staff between May and June 2010 to assist in monitoring contractor performance. According to the CLIN owner, the SLAMs assigned to monitor the network performance SLAs do not have the technical background necessary to effectively perform their duties. The CLIN owner was subsequently reassigned to a position outside of EDUCATE contract performance monitoring in October 2010. In addition, one of the two SLAMs added in 2010 is no longer in that role.

GAO "Standards for Internal Control in the Federal Government" states that "All personnel need to possess and maintain a level of competence that allows them to accomplish their assigned duties."

We determined that the Department did not define the knowledge, skills, and abilities needed for positions that monitor and validate SLAs. Instead, the Department used existing staff to fill the SLAM positions without always effectively considering whether the individuals were appropriately trained or experienced to perform the work. One SLAM stated that he was assigned to monitor network SLAs because his previous job position was terminated with the onset of the EDUCATE contract. The CLIN owner noted above took on more responsibilities than he was qualified for and capable of doing because of staff turnover.

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<sup>&</sup>lt;sup>8</sup> The Foundation Level is the entry level certification which offers candidates a general awareness of key elements, concepts and terminology used in the ITIL v3 Service Lifecycle, including the linkages between lifecycle stages, the processes used and their contribution to Service Management practices.

Individuals assigned to oversee contractor performance may be unable to do so effectively without the appropriate training or experience. This can result in the Department paying for a level of service that it is not receiving.

#### Recommendations

We recommend that the CIO

- 2.1 Identify the necessary knowledge, skills, and abilities required for oversight of each SLA and CLIN, and staff positions accordingly.
- 2.2 Provide the necessary training opportunities for current staff lacking the requisite technical skills to perform their assigned functions.

### **Department Comments**

OCIO concurred with the recommendations and provided a corrective action plan for each recommendation. OCIO agreed that not all SLAMs possess the requisite technical expertise needed to perform the required functions for each of the SLAs. However, OCIO stated that it is confident that the majority of SLAMs possess the requisite skills, knowledge, and experience to carry out their duties, such as general IT, analytical, and project management expertise. Further, according to OCIO, in November 2010, it significantly restructured resources and responsibilities in order to strengthen skills and abilities relating to specific SLAs.

#### **OIG Response**

While OIG acknowledges that SLAMs and CLIN owners reviewed as part of this audit likely possessed general IT knowledge, skills, and abilities, our finding focused on the lack of specialized technical expertise of some SLAM and CLIN owners that impacted their ability to effectively perform duties within the areas they were assigned. OCIO's response appears to highlight the general and fundamental IT and project management skills of the assigned SLAMs and CLIN owners and indicates that OCIO has taken steps to address the issues noted in our finding by reallocating resources in November 2010. However, at the time of the noted restructuring, OCIO still had not established the appropriate knowledge, skills, and abilities for all SLAM and CLIN owners. As evidenced in the finding, OCIO had previously assigned SLAMs and CLIN owners without having defined the necessary knowledge, skills, and abilities required of the positions, which resulted in employees being assigned to positions with roles and responsibilities they were not technically qualified to perform.

# FINDING NO. 3 – The Department Needs to Improve Processes for Validation of Chargeback Reports.

We found that the Department needs to improve its processes related to validation of chargeback reports. Specifically, the Department does not always use independent, accurate, and complete data for reconciling IT assets in the contractor-provided chargeback reports, provides limited time for affected parties to review the reports, and duplicates effort during the validation process. The validation process is further hindered by the fact that the Department has not established contractor performance metrics related to the completeness and accuracy of chargeback reports.

#### Lack of Independent, Accurate, and Complete Data

According to the Chargeback PM, POs are not required to independently maintain an inventory of PO equipment. Rather, the EDUCATE contractor uses data from the Asset Management Portal to update an OCIO web tool on a daily basis, and POCs can use this contractor-provided data, along with the contractor-provided annual inventory listing, for validating the contractor-prepared chargeback reports. We found 2 of the 5 POCs (40 percent) included in our review maintained their own inventory of equipment, while the remaining 3 used contractor data to validate chargeback reports. Additionally, 3 of the 5 POCs (60 percent) noted that the contractor data is not always accurate as discrepancies have been found between the contractor's asset management system and the contractor's data in OPAS.

Three out of 5 POCs (60 percent) also stated that they are not notified of all additions, moves, installs, and changes to user profiles submitted to the EDUCATE help desk, as not all requests require POC approval. Therefore POCs do not have complete records for validating charges for such requests on the chargeback reports.

#### Limited Time for Review and Duplication of Effort

Department officials have limited time to review chargeback reports. Specifically, 2 of the 5 selected POCs (40 percent) expressed concern that they had insufficient time to review the chargeback reports. We noted that the EDUCATE contractor has 2 weeks to generate and prepare the chargeback reports prior to submission to the Department. Once submitted to the Department, the Chargeback PMO review team has 5 calendar days to complete a preliminary review of the reports and recommend acceptance as a deliverable. After the chargeback reports are formally accepted, each POC receives the applicable report for review. POCs are allotted 3 business days for their review. Our review of chargeback reports from October 2009 through May 2010 noted that the 5 selected POCs averaged 611 user hardware/software profiles for validation per month. This ranged from an average of 1,479 in Federal Student Aid (FSA) to 233 in OCIO.

We also determined that numerous processes completed by the Chargeback PMO were duplicated by the POCs during their reviews. We noted that the Chargeback PMO team follows an internally generated 27-point review checklist during its validation process to include such items as matching summary totals, proper formatting, and completeness of data. Our discussion with the POCs noted that, while their processes vary due to a lack of formal policies and procedures, their reconciliation processes include at least 8 of the 27 items (29.6 percent) on the Chargeback PMO's checklist.

GAO "Standards for Internal Control in the Federal Government" states that control activities are an integral part of an entity's accountability for the stewardship of government resources and help ensure that actions are taken to address risks. It also states control activities, including verification, and the creation and maintenance of related records, helps to ensure that all transactions are completely and accurately recorded.

We determined that there are no written policies or procedures in place for reviewing chargeback reports. The Department's most current version of Handbook OM-05 "Property Management Manual" is dated December 31, 2002, and does not reflect the Department's current COCO environment regarding IT equipment and related services. We noted the Department is developing a Handbook for Property Management (Handbook) to supersede its Property Management Manual. The most recent draft of the Handbook was dated December 13, 2010, and included limited language reflecting the COCO environment. However, the Handbook appears to exclude equipment and services provided under the EDUCATE contract and therefore does not include any related procedures concerning the chargeback validation process.

According to the Chargeback PM, the Department provided instructions to the POCs for reconciling chargeback reports. However, the instruction document provided was prepared by the EDUCATE contractor and explains how to report errors found in the chargeback reports, not how to validate the chargeback reports. The Chargeback PM also felt that the annual physical inventory listing provided by the contractor was sufficient for providing independent data to reconcile against.

We also determined there are no clear roles or responsibilities communicated regarding the chargeback review process. Two of the 5 POCs (40 percent) interviewed were unaware of the review process being performed by the PMO review team and therefore unaware that the review process was being duplicated.

The Department negotiated the timeframes for the chargeback reporting process and agreed that the EDUCATE contractor would have until the 16<sup>th</sup> of each month to submit the chargeback reports and that the 23<sup>rd</sup> of each month would be the deadline for any changes to be made to the inventory. After this date, the information is used by the contractor to prepare the report due the following month. It appears this schedule may not allow all affected parties the ability to perform an adequate review of the chargeback reports. In addition, per the EDUCATE Chargeback Plan dated March 2, 2010, the Department agreed to not include incentives or disincentives defined in the EDUCATE contract as part of the chargeback process in order to keep the process as uncomplicated as possible and easily understandable to POs.

As a result, the Department lacks assurance that the chargeback reports contain accurate and complete information, that related billings are appropriate, and that its review processes are efficient and consistent. Without an independent data source to validate against, the Department is essentially comparing data to the same data used in compiling the reports, providing little value to the Department. As a result of POCs duplicating certain tasks performed by the Chargeback PMO team, the Department is not utilizing human resources efficiently.

By not providing an adequate amount of time for review of chargeback reports, errors and needed corrections may not be identified. PMO staff have noted that they need to work several hours of overtime each month in order to complete their reviews within the allotted timeframes.

We obtained the results of the chargeback report validations performed by the five POCs included in our review from October 2009 through May 2010. An average of 3,053 assets was assigned to the 5 POCs each month. The POC reviews identified a total average of 38 potential overcharges (1.2 percent) and 42 other errors (1.4 percent) in the chargeback reports each month. It is likely that additional problems with the chargeback reports could be identified by the POC reviews given additional time and independent data to validate against. Because the reports are officially accepted as deliverables before the POCs have had a chance to review them, the risk of acceptance of inaccurate reports and resulting improper payments is increased. Corrections identified by the POCs will not be captured timely and may not be communicated to the contractor.

Additionally, without established performance metrics, the contractor has no incentive for ensuring that the chargeback reports it prepares are substantially accurate and complete, to include making needed corrections as a result of Department feedback. We reviewed the results of chargeback report reviews performed by the PMO from August 2009 through September 2010. Error rates noted by the PMO during those months ranged from 13.95 percent to 2.31 percent, with an average monthly error rate of 5.83 percent. When asked about the types of errors being noted, the Chargeback PM stated they include duplicate charges, incorrect charges for software installation and basic help desk calls, as well as math errors. We noted that only 35 percent of the chargeback reports were deemed acceptable by the PMO as originally submitted. Twelve percent of the reports were not deemed acceptable until the third revision was submitted.

Requiring an expected level of performance from the contractor would assist in reducing the level of effort needed in the Department's validation efforts. While informal performance metrics have been established within the past year, there appears to be no penalty if the metrics are not met. We reviewed contractor performance against the established informal chargeback report metrics established from November 2009 through September 2010. The contractor was noted as meeting the metrics for only one of the months during that time period. However, no penalty was assessed to the contractor. The Chargeback PM stated that formal rejection of the reports is not realistically an option as it would set the chargeback process further behind. Report deficiencies are communicated informally to the contractor to stay within the allotted review timeframes.

#### **Recommendations**

We recommend that the CIO and CFO

3.1 Determine whether an independent data source is available for use in validating chargeback reports.

3.2 Establish and implement written procedures to reflect the intended chargeback report validation process. The procedures should reflect the current IT environment, identify roles and responsibilities of officials and offices involved in the chargeback report

<sup>&</sup>lt;sup>9</sup> Other errors include incorrect spelling of user names, equipment assigned to the wrong user, and equipment listed in the wrong location within a PO, none of which impact billing to the Department.

validation process, ensure sufficient time is available for effective review of the chargeback reports, and clearly define data sources to be used for validation purposes.

3.3 Formalize performance metrics for chargeback reports and hold the contractor accountable for submission of quality reports.

#### **Department Comments**

OCIO/OCFO concurred with the recommendations, with the exception of draft recommendation 3.1 relating to the determination of independent data sources for use in validating chargeback reports. OCIO/OCFO stated that EDUCATE already contains a system of record for asset management that serves as the official asset inventory database. Draft recommendation 3.1 would thus create a redundant source of chargeback data and would be contrary to good business practices, requiring continual, recurring reconciliation and diminishing the value of the official system of record. OCIO/OCFO provided a corrective action plan for the remaining recommendations.

### **OIG Response**

As noted in the finding, POCs rely on contractor-provided data and an annual contractor-provided asset inventory listing to validate contractor-prepared chargeback reports. As a result, the Department is essentially comparing data to the same data used in compiling the reports, providing little value to the Department. As also stated in the finding, 3 of the 5 POCs (60 percent) noted that the contractor data is not always accurate as discrepancies have been found between the contractor's asset management system and the contractor's data in OPAS. Draft recommendation 3.1 does not require the Department to create a duplicative system to manage IT assets, but rather to determine whether any alternative, independent data sources are available for use in validation to provide greater assurance that the Department is being appropriately billed.

# FINDING NO. 4 - The Department Needs to Modify its SLA Framework to Effectively Encourage Improvements in Contractor Performance.

The EDUCATE contract's SLA framework is ineffective in encouraging improvements in contractor performance and has not been effectively modified to focus on noted areas of substandard contractor performance. While the contract includes a percentage pool for incentives and disincentives tied to SLA performance, they are spread among numerous SLAs, resulting in diluted incentives and disincentives, which have little impact on the EDUCATE contractor's performance.

The EDUCATE SLA framework provides the performance standards applied during the Department's performance validation processes and identifies related incentives and disincentives. According to the SLA framework as of March 1, 2009, 8 percent of the monthly contract value shall be at risk through the use of disincentives. The 8 percent was proposed by the contractor and accepted by the Department. The Department has unilateral control over the allocation of the 8 percent among the 36 SLAs. Each quarter, the Department has the option to reallocate the disincentive weightings among the SLAs. Under the current SLA framework, the

8 percent in total disincentives is allocated across all 36 SLAs with a minimum disincentive of 0.13 percent and maximum of 0.30 percent. If a particular SLA has a disincentive invoked in one month due to missing the performance standard, and the performance standard is missed again in the next month, then the disincentive percentage is increased by 1.08. This is continued until the SLA performance standard is achieved or until the disincentive percentage is doubled. As a result, the maximum disincentive for ongoing substandard performance is 0.60 percent. Between March 2009 and February 2010, the EDUCATE contractor had disincentives applied to approximately 7 SLAs (19 percent) per month. During this same time period the EDUCATE contractor missed five SLA performance standards for five or more consecutive months. See Table 1.1 below.

**Table 1.1 – SLAs Missed for Five or More Consecutive Months** 

SLA	Number of Consecutive Months Between March 2009 and February 2010 Where Performance Standards Were Not Achieved	Percentage of Months Where Performance Standard Missed Consecutively
DS-1: IMAC (Install, Move,	5	42
Add, and Change)		
GN-3: Customer Survey	9	75
GN-5: Time to Resolve	12	100
NS-4: Video	6	50
Teleconferencing		
Availability		
SP-3: Enterprise	8	67
Vulnerability		

According to the Contracting Officer, the disincentives in the SLA framework are modified based on the need to influence the EDUCATE contractor's performance. Modification 47, dated November 26, 2009, revised the SLA framework by reallocating the disincentives and incentives among the 36 SLAs. However, the rationale for the reallocation was not documented by the Department in official contract files. A review of the SLA framework found that the range of disincentives allocated to each SLA remained unchanged, with a minimum disincentive of 0.13 percent and a maximum disincentive of 0.30 percent. Further review of the five SLAs noted above determined the Department did not materially revise related disincentives through Modification 47. See Table 1.2 below.

SLA	Disincentive Percentage Before Modification 47	Disincentive Percentage After Modification 47	Change In Disincentive Value
DS-1: IMAC	0.25%	0.27%	0.02%
GN-3: Customer Survey	0.23%	0.23%	0.00%
GN-5: Time to Resolve	0.27%	0.25%	-0.02%
NS-4: Video	0.23%	0.23%	0.00%
Teleconferencing Availability			
SP-3: Enterprise Vulnerability	0.23%	0.23%	0.00%
TOTAL	1.21%	1.21%	0.00%

Table 1.2 – Modification 47 Impact on Selected SLAs

Federal Acquisition Regulation (FAR) Subpart 16.401(a) states that incentive contracts are designed to obtain specific acquisition objectives by including appropriate incentive arrangements designed to (i) motivate contractor efforts that might not otherwise be emphasized; and (ii) discourage contractor inefficiency and waste.

#### FAR Subpart 16.402-2 states

To the maximum extent practicable, positive and negative performance incentives shall be considered in connection with service contracts for performance of objectively measurable tasks when quality of performance is critical and incentives are likely to motivate the contractor.

Technical performance incentives may be particularly appropriate in major systems contracts, both in development (when performance objectives are known and the fabrication of prototypes for test and evaluation is required) and in production (if improved performance is attainable and highly desirable to the Government).

Office of Federal Procurement Policy (OFPP) "A Guide to Best Practices for Performance-Based Service Contracting" dated October 1998 states

Where negative incentives are used, the deduction should represent as close as possible the value of the service lost. This amount is usually computed by determining the percentage of contract costs associated with each task. For example, if a given task represents 10 percent of the contract costs, then 10 percent will be the potential maximum deduction in the event of task failure.

We determined the implementation of an ineffective framework likely occurred because the Department did not effectively plan for or effectively implement the performance incentives as part of this contract. Further, there are no formal policies and procedures for evaluating the appropriateness of the SLA framework. There is also no supporting documentation that provides the rationale for selecting the past and present SLA framework, which could assist the Department in determining the appropriateness of future actions.

The Department's methodology for allocating incentives and disincentives limits its ability to effectively motivate and manage the EDUCATE contractor's performance. As evidenced above, although the contractor repeatedly did not achieve the SLA performance standards for multiple SLAs during the scope of our review, the resulting impact of the disincentives on the amount paid to the contractor was negligible. More effective use of incentives and disincentives could encourage the contractor to improve performance and do so in a timely manner.

During the course of the audit, we reviewed the incentive plan for a similar performance-based IT contract. We found that the FSA Virtual Data Center (VDC) contract included an incentive plan that appeared to provide a more appropriate performance structure than the EDUCATE SLA framework. Specifically, the FSA VDC contract's incentive plan included significant and material incentives and disincentives that should discourage poor contractor performance. For example, the VDC contract provides for a maximum of 41 percent in total disincentives to be applied in any given month, compared to the 8 percent maximum in total monthly disincentives that can be applied under the EDUCATE contract. We noted that the 8 percent in disincentives that can be applied across all performance measures under the EDUCATE contract is the same amount that can be applied to a single performance measure under the VDC contract.

#### Recommendations

We recommend that the CIO and CFO

- 4.1 Reevaluate the allocation of incentives and disincentives to ensure they are effective in achieving the desired results of the SLA framework, based upon guidelines and best practices for performance-based contracting.
- 4.2 Establish and implement guidelines for routine reviews and evaluations of the appropriateness of the allocation of incentives and disincentives.
- 4.3 Ensure that decisions about reallocating incentives and disincentives are adequately documented.
- 4.4 Review other IT contracts utilizing incentive plans to identify possible best practices that could be established for the EDUCATE contract.

### **Department Comments**

OCIO/OCFO concurred with the recommendations and provided a corrective action plan for each of the recommendations.

#### **OIG Response**

OIG found that the Department's response to recommendation 4.2 was inconsistent with our recommendation. The Department's corrective action plan focused on evaluating the current process for monitoring SLAs. However, recommendation 4.2 relates to routine reviews and evaluations of the appropriateness of the SLA framework—specifically the allocation of contract incentives and disincentives. As a result, we have slightly modified recommendation 4.2 to more clearly define its intent.

## **OBJECTIVE, SCOPE, AND METHODOLOGY**

The objective of our audit was to determine whether the Department had adequate controls in place to validate the EDUCATE contractor's performance prior to authorizing payment of invoices. Specifically, we assessed whether the Department had adequate processes in place to validate contractor-submitted (1) SLA performance data and calculations, and (2) chargebacks of unit-based expenses. To accomplish our objectives, we gained an understanding of internal control applicable to the SLA validation and chargeback report validation processes. In addition, we obtained an understanding of controls related to the EDUCATE contract's SLA framework because it serves as the fundamental basis for the Department's assessment of contractor performance. We reviewed applicable laws and regulations, Department policies and procedures, relevant EDUCATE and IV&V contract documentation, GAO "Standards for Internal Control in the Federal Government," OFPP's "A Guide to Best Practices for Performance-Based Service Contracting," and prior reports issued by OIG related to the EDUCATE contract. Specific information on the scope and methodology applicable to each of the key areas reviewed during our audit are presented below.

#### **SLA Validation**

We judgmentally selected for review 7 of the 36 SLAs (19 percent) included in the EDUCATE contract based on issues identified by the IV&V contractor, significance of each SLA to the Department, areas deemed high-risk by the audit team, coverage across multiple SLA categories, and the audit team's technical competency to effectively assess related processes. [See Enclosure 1 for selected SLAs.]

The scope of our review included analysis of the processes in place to validate SLA performance between November 2007 and March 2010. To assess the effectiveness of the Department's processes to validate contractor-submitted SLA performance data and calculations we:

- 1. Interviewed the six SLAMs assigned to monitor the seven selected SLAs<sup>10</sup> regarding the duties they were assigned to perform, their applicable qualifications, and the processes they used to review and validate the SLA performance data provided by the contractor.
- 2. Reviewed policies and procedures related to the validation processes for each of the selected SLAs.
- 3. Created flow charts of the processes for each SLA and obtained concurrence from the applicable SLAM that our understanding of processes in place was accurate.
- 4. Conducted discussions with IV&V officials regarding their role and responsibilities in the validation process and reviewed relevant IV&V contract documentation.
- 5. Reviewed monthly IV&V contractor reports from April 2009 through March 2010 related to help desk ticket quality reviews.
- 6. Independently validated the results of a process used by the Department to validate performance of one judgmentally selected SLA. Specifically, GN-5, Time to Resolve, was selected for validation because of its significance to Department operations. This

<sup>&</sup>lt;sup>10</sup> One of the SLAMs interviewed was assigned responsibility for monitoring two of the selected SLAs.

- SLA measures the effectiveness of the contractor in resolving IT incidents that impact Department employees.
- 7. Interviewed OCIO officials regarding items such as the Department's efforts to gain assurance of the accuracy and completeness of the EDUCATE contractor's performance data and the qualification criteria used to assign SLAMs.

## **Chargeback Report Validation**

We judgmentally selected to review the chargeback validation processes employed by the 5 largest of the Department's 24 POs (21 percent) based on the total number of assigned workstations as of June 2009. These POs accounted for 3,532 of 5,882 (60 percent) of the workstations billed to the Department by the EDUCATE contractor through the chargeback reports. The scope of our review included analysis of the processes in place to validate chargeback reports between November 2007 and February 2010.

We interviewed the POCs in charge of validating the chargeback reports regarding the duties they were assigned to perform, any guidance they had received related to validating chargeback reports, and the process used to review and reconcile the chargeback data provided by the contractor. We also interviewed OCIO officials charged with responsibility for the initial review of the chargeback reports and recommendation of acceptance of the contractor's deliverables.

We reviewed documentation provided by the OCIO officials outlining the process followed and areas included in the review and validation of the reports, as well as data provided related to the errors noted during OCIO reviews in conjunction with any related performance metrics. We also obtained and analyzed documentation provided by selected POCs that identified items they considered errors in chargeback reports reviewed.

#### **SLA Framework**

We obtained and analyzed contractual documentation identifying the individual SLAs, related performance standards, and potential impact of performance on contractor payments. We judgmentally selected the period between March 2009 and February 2010 for review of monthly invoices, as this was the most current 12-month period as of the start of our review. We analyzed the disincentives to determine the average number of disincentives applied per month as well as the number of SLAs that had disincentives applied over consecutive months. We interviewed OCIO and OCFO officials to obtain an understanding of the SLA framework and their role in establishing and modifying the framework.

Because there is no assurance that the judgmental samples used in this audit are representative of their respective universe, the results should not be projected over the unsampled SLAs and chargeback validation processes.

Use of computer-processed data for the audit was generally limited to contractor and Department developed reports that supported performance and billing. This included monthly SLA reports, IV&V monthly reports, chargeback reports, and monthly invoices. We did not specifically assess the reliability of the computer-processed data. Rather, we assessed the Department's processes to validate this data prior to invoice payment. As such, the computer-processed data itself did not have a material effect on the findings, conclusions or recommendations. Control deficiencies noted with data validation processes are identified in the audit findings.

We conducted fieldwork at Department offices in Washington, D.C., from April 2010 through December 2010. We provided our audit results to OCIO staff during an exit conference conducted on December 7, 2010. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# **Enclosure 1**

# **Summary of Selected SLAs**

SLA Number	SLA Name	SLA Description
DS-1	IMAC	Measures the average time to complete IMAC requests
		relative to a specific user for hardware, software,
		telecommunications, and any cabling items included
		under the EDUCATE contract.
HD-1	Disable User Accounts	Measures the time for deletion, suspension, and changes
		of access authorizations and codes for Department or
		contractor user accounts.
HD-4	First Call Resolution	Measures the ability of the EDUCATE Help Desk to
		complete "resolvable" incidents for hardware, software
		and system components within the desktop environment
		that impact customers.
GN-3	Customer Survey	Measures whether the services received from the
		EDUCATE contractor were satisfactory.
GN-5	Time to Resolve	Measures the time it takes for the contractor to resolve
		incidents for existing hardware, software, and
		telecommunications components within the Department
		that impact employees.
NS-2	Network Latency	Measures the amount of time it takes for data to travel
		from an end-user across the EDUCATE contractor's
		network to all EDUCATE locations.
SP-1	Event and Incident	Measures the start/stop time to complete event
	Response	notification, incident notification, time to containment,
		and resolution.

#### **Enclosure 2**

## Acronyms/Abbreviations Used in this Report

ALO Audit Liaison Officer

CAP Corrective Action Plan

CFO Chief Financial Officer

CIO Chief Information Officer

CLIN Contract Line Item Number

COCO Contractor-Owned Contractor-Operated

COR Contracting Officer's Representative

CPSS Contract and Purchasing Support System

Department U.S. Department of Education

EDUCATE Education Department Utility for Communications, Applications, and Technology

Environment

FAR Federal Acquisition Regulation

FSA Federal Student Aid

GAO Government Accountability Office

Handbook Draft Handbook for Property Management, OM 05, dated December 13, 2010

IMAC Install, Move, Add, and Change

IT Information Technology

ITIL Information Technology Infrastructure Library

IV&V Independent Verification and Validation

OCIO Office of the Chief Information Officer

OFPP Office of Federal Procurement Policy

OIG Office of Inspector General

OPAS Operational Process Application Suite System

PM Program Manager

PMO Program Management Office

PO Principal Office

POC Principal Office Coordinator

SLA Service Level Agreement

SLAM Service Level Agreement Monitor

VDC Virtual Data Center



#### UNITED STATES DEPARTMENT OF EDUCATION

WASHINGTON, D.C. 20202-

April 11, 2011

#### **MEMORANDUM**

TO: Michele Weaver-Dugan, Director

Operations Internal Audit Team

FROM: Danny A. Harris, Ph.D.

Chief Information Officer

Thomas P. Skelly

Nerros P. Shell Delegated to Perform Functions and Duties of the Chief Financial Officer

Office of the Chief Financial Officer

SUBJECT: Response to Draft Audit Report

Department's Processes for Validating the EDUCATE Contractor's Performance

Control Number ED-OIG/A19K0007

Thank you for providing the subject Draft Audit Report entitled "Department's Processes for Validating the EDUCATE Contractor's Performance". We appreciate the diligence and expertise provided by your team in conducting this extensive work. Your Draft Audit Report provides valuable insight into the effectiveness of the EDUCATE contract performance, processes and measurement practices and accurately identifies several areas of needed improvement. It is apparent, however, that limited consideration was given to the extraordinary strides taken by this office during the past year to address many of the specific issues presented in your report. Much of the report addresses the reliance upon data provided by the EDUCATE contractor that is used by the Department to measure performance.

However, the report often fails to note improvements that have been made or contractual and other restrictions associated with the management of this data, including minimizing duplicative processes, prudent fiscal management, system security limitations negating the use of multiple data providers, and adherence to industry best practices. OCIO appreciates the insight and attention provided by this report and is looking forward to working closely with your office to manage the recommendations that you have identified. However, it is also important to note that many of the management improvements implemented prior to the beginning of the audit are presently demonstrating significant improvement in the management of the EDUCATE contract.

The following is OCIO's responses to the Findings and associated Recommendations provided. OCIO will address each recommendation as stipulated in the plan provided, and as agreed upon by your office.



FINDING No. 1 – The Department Needs to Improve Processes for Validation of Service Level Agreement Performance.

1.1 Review all SLAs and identify possible source of independent supporting data to be used for SLA performance validation.

#### **Proposed Corrective Action -**

OCIO and OCFO concur with this recommendation and will identify possible sources of independent SLA supporting data where possible. It is important to note, however, that the EDUCATE contract specifically calls for the collection, retention and provision of much of the specific data that is used to assess the respective SLAs. In these circumstances, it is necessary to collect and evaluate this specific data to evaluate SLA performance, regardless of the fact that the EDUCATE contractor was responsible for collection and maintenance of the data. For this reason, OCIO invests resources to assess audit trails of the data sufficient to ensure its reliance and attest to its authenticity.

In addition to identifying possible sources of independent SLA measurement data as recommended in your draft report, OCIO and OCFO shall establish written policies and procedures to ensure that available audit trails are maintained and evaluated by routinely sampling data to validate its accuracy and integrity.

OCIO shall identify possible sources of independent SLA supporting data where possible and establish OCIO Policies and Procedures to be used to validate data authenticity and integrity by June 1, 2011.

1.2 Implement procedures to periodically test underlying performance data in the contractor's systems for accuracy, especially data that is being relied upon for SLA validation purposes.

#### Proposed Corrective Action -

OCIO and OCFO concur with this recommendation and, as stated in response to the previous recommendation, will implement written procedures to periodically test underlying performance data in the contractor's system for accuracy, especially data that is being relied upon for SLA validation purposes. It should be noted, however, that OCIO presently reviews a significant sampling of all OPAS records and conducts independent tests of other hardware and software applications related to data used for SLA measurement.

OCIO and OCFO shall implement procedures to periodically test underlying performance data in the contractor's system for accuracy, especially data that is being relied upon for SLA validation purposes by June 1, 2011.

1.3 Formally establish and implement validation procedures, to include the identification of appropriate supporting documentation to be used for validation, for each SLA.

Proposed Corrective Action -

OCIO and OCFO concur with this recommendation and will establish and implement written validation procedures, to include the identification of appropriate supporting documentation to be used for validation, for each SLA. Please be aware however, that specific instruction used to measure SLAs presently exists as shared agreements within the EDUCATE contract. These are strictly adhered to by the SLA monitors (SLAMs) in conducting periodic evaluations and shall be considered in the design of the established validation procedures.

1.4 Review SLA validation tasks performed by the IV&V contractor against those performed by SLAMs and eliminate identified duplicative efforts.

#### Proposed Corrective Action -

OCIO and OCFO do not concur with this recommendation on the basis of the necessity of independence of the IV&V contractor. It is imperative that the analytical products of the IV&V contractor be used as assessment tools to determine the validity of the services provided by the EDUCATE contractor, as well as the processes used by SLAMs to measure performance. The use of IV&V products as SLA evaluation tools rather than independent management evaluation tools is contrary to the independent nature and underlying intent of the IV&V service provided. IV&V reports are generally duplicative of SLAM reports by intention, and primarily used to assess the accuracy and appropriateness of the SLA, the SLAM processes, and of the trends associated with these measures. In all cases, IV&V services are intentionally held independent of the contract management processes and free of influence of contract or management designs.

# FINDING No. 2 – The Department Needs to Ensure SLAMs Have Appropriate Technical Expertise to Monitor Assigned EDUCATE Contract SLAs.

2.1 Identify the necessary knowledge, skills, and abilities required for oversight of each SLA and CLIN, and staff positions accordingly.

#### **Proposed Corrective Action –**

OCIO concurs that not all SLAMs possess the requisite technical expertise needed to appropriately perform the required functions for each of the SLAs, and will identify the necessary knowledge, skills, and abilities required for oversight of each SLA and CLIN, and shall staff positions accordingly and as applicable within human resource and budget constraints. OCIO shall establish guidelines identifying appropriate knowledge, skills and abilities by June 1, 2011.

Though OCIO concurs that some SLAMs may lack suitable technical expertise to adequately perform the necessary functions of the position, OCIO is confident that the majority do possess the requisite skills, knowledge and experience to carry out the necessary oversight duties. It warrants notice that resource and responsibilities were significantly restructured in November of 2010 as OCIO determined the need to strengthen skills and abilities relating to specific SLAs. Although each CLIN owner and SLAM perform unique functions, general IT, analytical, and Project Management expertise are necessary skills relating to management

and oversight of SLAM functions. OCIO presently ensures that fundamental skills, knowledge and experience are possessed by the current CLIN owners and SLA monitors including the following:

- Ability to apply advanced IT principles, standards, and practices sufficient to accomplish
  assignments such as: develop and interpret strategies and policies governing the
  planning and delivery of IT services throughout the agency;
- Provide expert technical advice, guidance, and recommendations to management and other technical specialists on critical IT issues;
- Apply new developments to previously unsolvable problems and make decisions or recommendations that significantly influence important agency IT policies or programs;
- Apply interrelationships of multiple IT specialties, the agency's IT architecture, new IT developments and applications, emerging technologies and their applications, IT security concepts, standards, and methods;
- Use Project Management principles, methods, and practices including developing plans and schedules, estimating resource requirements, defining milestones and deliverables, monitoring activities, and evaluating and reporting on accomplishments; and
- Oral and written communications techniques.

# 2.2 Provide the necessary training opportunities for current staff lacking the requisite technical skills to perform their assigned functions.

#### **Proposed Corrective Action –**

OCIO concurs with this recommendation. Training has and will continue to be identified, recommended, and made available to all OCIO staff responsible for the management and oversight of the EDUCATE contract.

OCIO shall prepare a list of the requisite knowledge, skills, and abilities required for oversight of each SLA and CLIN and ensure appropriate training is indentified and available for inclusion on the Individual Development Plans (IDPs) for each SLAM and CLIN owner. The list for recommended training for SLAMs and CLIN owners to include on IDPs shall be completed by December 31, 2011.

FINDING No. 3 – the Department Needs to Improve Processes for Validation of Chargeback Reports.

3.1 Determine whether an independent data source is available for use in validating chargeback reports.

#### **Proposed Corrective Action -**

OCIO and OCFO do not concur with this recommendation. The Asset Management Portal (AMP) is the EDUCATE system of record for asset management and serves as the official asset inventory database. OCIO and OCFO believe that maintaining a redundant source of charge back data would equate to the use of a "Cuff Record" and would be contrary to good business practices, requiring continual, recurring reconciliation and diminishing the value of

the official system of record. OCIO and OCFO assert that keeping a cuff system would not improve the validation of chargeback reports or information, and that creating such an independent data source would add an additional layer of necessary reconciliation and risk to the business process.

3.2 Establish and implement written procedures to reflect the intended chargeback report validation process. The procedures should reflect the current IT environment, identify roles and responsibilities of officials and offices involved in the chargeback report validation process, ensure sufficient time is available for effective review of the chargeback reports, and clearly defined data sources to be used for validation proposes.

#### **Proposed Corrective Action –**

OCIO and OCFO concur with this recommendation. OCIO and OCFO shall develop and implement a Departmental ACS Directive governing the appropriate processes to be used to validate the chargeback reports, and identify the roles and responsibilities of officials and offices involved in these processes. The ACS directive shall establish a schedule of events to ensure adequate time is given to allow program offices to validate the chargeback reports and shall clearly define the data sources to be used for such validation. The ACS Directive shall be drafted, approved, and published by December 31, 2011.

3.3 Formalize performance metrics for chargeback reports and hold the contractor accountable for submission of quality reports.

#### Proposed Corrective Action -

OCIO and OCFO concur with this recommendation. OCIO and OCFO shall create performance metrics to be used in validating the accuracy of the information received on the monthly chargeback reports as well as a method of tracking discrepancies identified by POs to ensure that the information is corrected on the following month's report. OCIO and OCFO shall complete these performance metrics by September 30, 2011.

FINDING No. 4 – The Department Needs to Modify its SLA Framework to Effectively Encourage Improvements in Contractor Performance.

4.1 Reevaluate the allocation of incentives and disincentives to ensure they are effective in achieving the desired results of the SLA framework, based upon guidelines and best practices for performance-based contracting.

#### Proposed Corrective Action -

OCIO and OCFO concur with this recommendation and have initiated Contract Modifications 78 and 80 for the purpose of reallocating and maximizing the incentives and disincentives allowable to improve effectiveness of the SLA framework. Decisions made followed discussions with other Federal Agencies to address best practices relating to the use of incentives and disincentives in managing large IT contracts.

Modifications 78 and 80 shall be agreed to by the EDUCATE Contractor by May 31, 2011.

4.2 Establish and implement guidelines for routine reviews and evaluations of the appropriateness of the SLA framework.

#### Proposed Corrective Action -

OCIO and OCFO concur with this recommendation. The CIO has initiated a team to evaluate the effectiveness of each of the SLA review processes. The team is evaluating the current processes used to monitor the various SLAs, shall validate that monitoring actions are complete and properly documented, and shall finalize their analysis by providing recommend improvements to the SLA monitoring process. OCIO shall provide SLA Review Guidelines to all CLIN owners and SLAMs by June 30, 2011.

4.3 Ensure that decisions about reallocating disincentives and incentives are adequately documented.

#### Proposed Corrective Action -

OCIO and OCFO concur with this recommendation and shall ensure that the EDUCATE contract management staff are made aware of the importance of fully documenting all considerations, intentions and logic used to support decisions regarding changes and use of EDUCATE contract incentives and disincentives. OCIO and OCFO leadership shall meet with EDUCATE management staff to ensure that all parties are aware of the necessity for adequate preparation and retention of such supporting documentation by April 30, 2011.

4.4 Review other IT contracts utilizing incentive plans to identify possible best practices that could be established for the EDUCATE contact.

#### **Proposed Corrective Action –**

OCIO and OCFO concur with this recommendation and have initiated discussions regarding best practices related to incentive plans used by other Federal agencies in managing large IT contracts. OCIO and OCFO shall continue to pursue best practices relating to incentive plans with additional agencies and document our findings. Results of discussions with other Federal agencies related to incentive plans shall be documented by May 31, 2011.

We sincerely appreciate the expertise and commitment to quality that has been provided by OIG in conducting this audit. OCIO and OCFO will quickly address all issues as presented in this response, once agreement to our proposed actions is received. I look forward to continued partnership with you and your staff as we work together to improve the Department's management of the EDUCATE contract.

If you have any questions, please do not hesitate to contact Greg Robison of my staff at 202-245-7187.